



IFWO

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/763,976A

DATE: 10/12/2004
TIME: 12:30:42

Input Set : D:\Warf Sequence.ST25.txt
Output Set: N:\CRF4\10122004\J763976A.raw

3 <110> APPLICANT: Harms, Jerome S
4 Splitter, Gary A
5 Eakle, Kurt A
6 Bremel, Robert D
8 <120> TITLE OF INVENTION: Inducible Protein Expression System
10 <130> FILE REFERENCE: 2240/3
12 <140> CURRENT APPLICATION NUMBER: US 10/763,976A
13 <141> CURRENT FILING DATE: 2004-01-23
15 <160> NUMBER OF SEQ ID NOS: 65
17 <170> SOFTWARE: PatentIn version 3.3
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 576
21 <212> TYPE: DNA
22 <213> ORGANISM: Artificial
24 <220> FEATURE:
25 <223> OTHER INFORMATION: Engineered Sequence from virus and plasmid
28 <220> FEATURE:
29 <221> NAME/KEY: Promoter
30 <222> LOCATION: (87)..(432)
31 <223> OTHER INFORMATION: BLV Promoter
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35 ccatggccgc tttggtcgag gcggatccta gcagaaaaat aagacttgcat tcccccttaa 120
36 aattacaact gctagaaaat gaatggctt cccgcctttt ttgagggggaa atcatttgc 180
37 tggaaagatca tgccgaccta ggcgcgccta cccgcctttt aaccagacag agacgtcagc 240
38 tgccagaaaa gctggtgacg gcagctgggt gctagaatcc cccgtacctcc ccaacttccc 300
39 ctttcccgaa aaatcccacac cctgagctgc tgacccacc tgctgataaa ttaataaaaat 360
40 gccggccctg tcgagttgc ggcaccagaa gcgttcttct cctgagaccc tcgtgctcag 420
41 ctctcggtcc tgcctcgaga agcttgcata cacaagtttgc tacaaaaaaat ctgaacgaga 480
42 aacgtaaaaat gatataaata tcaatataatt aaatttagatt ttgcataaaa aacagactac 540
43 ataatactgt aaaacacacaac atatccagtc actatgc 576
55 <210> SEQ ID NO: 2
56 <211> LENGTH: 930
57 <212> TYPE: DNA
58 <213> ORGANISM: Bovine leukemia virus
61 <220> FEATURE:
62 <221> NAME/KEY: CDS
63 <222> LOCATION: (1)..(930)
65 <400> SEQUENCE: 2
66 atg gca agt gtt gtt ggt tgg ggg ccc cac tct cta cat gcc tgc ccg 48
67 Met Ala Ser Val Val Gly Trp Gly Pro His Ser Leu His Ala Cys Pro
68 1 5 10 15
70 gcc ctg gtt ttg tcc aat gac gtc acc atc gat gcc tgg tgc ccc ctc 96

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71	Ala	Leu	Val	Leu	Ser	Asn	Asp	Val	Thr	Ile	Asp	Ala	Trp	Cys	Pro	Leu	
72			20					25				30					
74	tgc	ggg	ccc	cat	gag	cga	ctc	caa	tcc	gaa	agg	atc	gac	acc	acg	cac	144
75	Cys	Gly	Pro	His	Glu	Arg	Leu	Gln	Phe	Glu	Arg	Ile	Asp	Thr	Thr	His	
76			35					40				45					
78	acc	tgc	gag	acc	cac	cgt	atc	acc	tgg	acc	gcc	gat	gga	cga	cct	ttc	192
79	Thr	Cys	Glu	Thr	His	Arg	Ile	Thr	Trp	Thr	Ala	Asp	Gly	Arg	Pro	Phe	
80			50					55			60						
82	ggc	ctc	aat	gga	gcg	ctg	ttc	cct	cga	ctg	cat	gtc	tcc	aga	gac	ccg	240
83	Gly	Leu	Asn	Gly	Ala	Leu	Phe	Pro	Arg	Leu	His	Val	Ser	Arg	Asp	Pro	
84	65			70					75			80					
86	gcc	cca	agg	gcc	cga	cga	ctc	tgg	atc	aac	tgc	ccc	ctt	ccg	gcc	gtt	288
87	Ala	Pro	Arg	Ala	Arg	Arg	Leu	Trp	Ile	Asn	Cys	Pro	Leu	Pro	Ala	Val	
88			85					90			95						
90	cgc	gct	cag	ccc	ggc	ccg	gtt	tca	ctt	tcc	ccc	ttc	gag	cg	tcc	ccc	336
91	Arg	Ala	Gln	Pro	Gly	Pro	Val	Ser	Leu	Ser	Pro	Phe	Glu	Arg	Ser	Pro	
92			100					105			110						
94	ttc	cag	ccc	tac	caa	tgc	caa	ttg	ccc	tgc	gcc	tct	agc	gac	ggt	tgc	384
95	Phe	Gln	Pro	Tyr	Gln	Cys	Leu	Pro	Ser	Ala	Ser	Ser	Asp	Gly	Cys		
96			115					120			125						
98	ccc	gtc	atc	ggg	cac	ggc	ctt	ctt	ccc	tgg	aac	aac	tta	gta	acg	cat	432
99	Pro	Val	Ile	Gly	His	Gly	Leu	Leu	Pro	Trp	Asn	Asn	Leu	Val	Thr	His	
100			130					135			140						
102	cct	tgt	cct	cg	aaa	gtc	ctt	ata	tta	aat	caa	atg	gcc	aat	ttt	tcc	480
103	Pro	Cys	Pro	Arg	Lys	Val	Ile	Leu	Asn	Gln	Met	Ala	Asn	Phe	Ser		
104	145					150			155			160					
106	tta	ctc	ccc	ccc	ttc	aat	acc	ctc	ctt	gtg	gac	ccc	ctc	cg	ttg	tcc	528
107	Leu	Leu	Pro	Pro	Phe	Asn	Thr	Leu	Leu	Val	Asp	Pro	Leu	Arg	Leu	Ser	
108						165			170			175					
110	gtc	ttt	gcc	cca	gac	acc	agg	gga	gcc	ata	cgt	tat	ctc	tcc	acc	ctt	576
111	Val	Phe	Ala	Pro	Asp	Thr	Arg	Gly	Ala	Ile	Arg	Tyr	Leu	Ser	Thr	Leu	
112			180					185			190						
114	ttg	acg	cta	tgc	cca	gct	act	tgt	att	cta	ccc	ctc	ggc	gag	ccc	ttc	624
115	Leu	Thr	Leu	Cys	Pro	Ala	Thr	Cys	Ile	Leu	Pro	Leu	Gly	Glu	Pro	Phe	
116			195					200			205						
118	tct	cct	aat	gtc	ccc	ata	tgt	cgc	ttt	ccc	cg	gac	tcc	aat	gaa	ccc	672
119	Ser	Pro	Asn	Val	Pro	Ile	Cys	Arg	Phe	Pro	Arg	Asp	Ser	Asn	Glu	Pro	
120			210					215			220						
122	ccc	ctt	tca	gaa	ttc	gag	ctg	ccc	ctt	atc	caa	acg	ccc	ggc	ctg	tct	720
123	Pro	Leu	Ser	Glu	Phe	Glu	Leu	Pro	Leu	Ile	Gln	Thr	Pro	Gly	Leu	Ser	
124	225					230			235			240					
126	tgg	tct	gtc	ccc	g	atc	gac	cta	ttc	cta	acc	ggc	ccc	cct	tcc	cca	768
127	Trp	Ser	Val	Pro	Ala	Ile	Asp	Leu	Phe	Leu	Thr	Gly	Pro	Pro	Ser	Pro	
128						245			250			255					
130	tgc	gac	cg	tta	cac	gt	tgg	tcc	agt	cct	cag	gcc	tta	cag	cg	ttc	816
131	Cys	Asp	Arg	Leu	His	Val	Trp	Ser	Ser	Pro	Gln	Ala	Leu	Gln	Arg	Phe	
132			260					265			270						
134	ctc	cat	gac	cct	acg	cta	acc	tgg	tca	gaa	ttg	gtt	gct	agc	agg	aaa	864
135	Leu	His	Asp	Pro	Thr	Leu	Thr	Trp	Ser	Glu	Leu	Val	Ala	Ser	Arg	Lys	

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136	275	280	285	
138	cta aga ctt gat tca ccc tta aaa tta caa ctg tta gaa aat gaa tgg			912
139	Leu Arg Leu Asp Ser Pro Leu Lys Leu Gln Leu Leu Glu Asn Glu Trp			
140	290	295	300	
142	ctc tcc cgc ctt ttt tga			930
143	Leu Ser Arg Leu Phe			
144	305			
147	<210> SEQ ID NO: 3			
148	<211> LENGTH: 309			
149	<212> TYPE: PRT			
150	<213> ORGANISM: Bovine leukemia virus			
152	<400> SEQUENCE: 3			
154	Met Ala Ser Val Val Gly Trp Gly Pro His Ser Leu His Ala Cys Pro			
155	1	5	10	15
158	Ala Leu Val Leu Ser Asn Asp Val Thr Ile Asp Ala Trp Cys Pro Leu			
159	20	25	30	
162	Cys Gly Pro His Glu Arg Leu Gln Phe Glu Arg Ile Asp Thr Thr His			
163	35	40	45	
166	Thr Cys Glu Thr His Arg Ile Thr Trp Thr Ala Asp Gly Arg Pro Phe			
167	50	55	60	
170	Gly Leu Asn Gly Ala Leu Phe Pro Arg Leu His Val Ser Arg Asp Pro			
171	65	70	75	80
174	Ala Pro Arg Ala Arg Arg Leu Trp Ile Asn Cys Pro Leu Pro Ala Val			
175	85	90	95	
178	Arg Ala Gln Pro Gly Pro Val Ser Leu Ser Pro Phe Glu Arg Ser Pro			
179	100	105	110	
182	Phe Gln Pro Tyr Gln Cys Gln Leu Pro Ser Ala Ser Ser Asp Gly Cys			
183	115	120	125	
186	Pro Val Ile Gly His Gly Leu Leu Pro Trp Asn Asn Leu Val Thr His			
187	130	135	140	
190	Pro Cys Pro Arg Lys Val Leu Ile Leu Asn Gln Met Ala Asn Phe Ser			
191	145	150	155	160
194	Leu Leu Pro Pro Phe Asn Thr Leu Leu Val Asp Pro Leu Arg Leu Ser			
195	165	170	175	
198	Val Phe Ala Pro Asp Thr Arg Gly Ala Ile Arg Tyr Leu Ser Thr Leu			
199	180	185	190	
202	Leu Thr Leu Cys Pro Ala Thr Cys Ile Leu Pro Leu Gly Glu Pro Phe			
203	195	200	205	
206	Ser Pro Asn Val Pro Ile Cys Arg Phe Pro Arg Asp Ser Asn Glu Pro			
207	210	215	220	
210	Pro Leu Ser Glu Phe Glu Leu Pro Leu Ile Gln Thr Pro Gly Leu Ser			
211	225	230	235	240
214	Trp Ser Val Pro Ala Ile Asp Leu Phe Leu Thr Gly Pro Pro Ser Pro			
215	245	250	255	
218	Cys Asp Arg Leu His Val Trp Ser Ser Pro Gln Ala Leu Gln Arg Phe			
219	260	265	270	
222	Leu His Asp Pro Thr Leu Thr Trp Ser Glu Leu Val Ala Ser Arg Lys			
223	275	280	285	
226	Leu Arg Leu Asp Ser Pro Leu Lys Leu Gln Leu Leu Glu Asn Glu Trp			

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227	290	295	300	
230	Leu Ser Arg Leu Phe			
231	305			
234	<210> SEQ ID NO: 4			
235	<211> LENGTH: 1062			
236	<212> TYPE: DNA			
237	<213> ORGANISM: Human T-cell lymphotropic virus type 1			
240	<220> FEATURE:			
241	<221> NAME/KEY: promoter			
242	<222> LOCATION: (1)..(353)			
244	<400> SEQUENCE: 4			
245	atggcccaact tccagggtt tggacagagt cttctttcg gataccagt ctacgtgtt	60		
247	ggagacggcg actgggtccc ctgtgtacaa atctctgggg gactatgttc ggccgccta	120		
249	catcgtaacg ccctactggc cacctgtcca gagcatcaga tcacctggga ccccatcgat	180		
251	gjacgcgtta tcggctcagc tctacagttc cttatccctc gactccctc cttccccacc	240		
253	cagagaacct ctaagaccct caaggtcctt accccgccaa tcactcatac aacccccaac	300		
255	attccacccct ctttctcca ggccatgcgc aaatactccc cttccgaaa tggatacatg	360		
257	gaacccaccc ttgggcagca cttcccaacc ctgtctttc cagaccccg actccggccc	420		
259	caaaacctgt acaccctctg gggaggctcc gttgtctgca tgtacctcta ccagcttcc	480		
261	ccccccatca cctggccctt cctgcccac gtgattttt gccaccccg ccagctcgaa	540		
263	gccttctca ccaatgttcc ctacaagcga atagaagaac tcctctataa aattttccctt	600		
265	accacagggg ccctaataat tctacccgaa gactgtttgc ccaccaccc tttccagcct	660		
267	gttagggcac ccgtcacgct aacagcctgg caaaacggcc tccttccgtt ccactcaacc	720		
269	ctcaccactc caggccttat ttggacattt accgatggca cgcctatgtat ttccggggccc	780		
271	tgccctaaag atggccagcc atcttttagta ctacagtctt cctcctttat atttcacaaa	840		
273	tttcaaccca aggcctacca cccctcattt ctactctcac acggcctcat acagtactct	900		
275	tcctttcata atttacatct cctgtttgaa gaatacacca acatcccat ttctctactt	960		
277	tttaacaaaaa aagaggcaga tgacaatgac catgagcccc aaatatcccc cgggggctta	1020		
279	gagcctccca gtaaaaaca tttccgcgaa acagaagtct ga	1062		
282	<210> SEQ ID NO: 5			
283	<211> LENGTH: 353			
284	<212> TYPE: DNA			
285	<213> ORGANISM: Human T-cell lymphotropic virus type 1			
287	<400> SEQUENCE: 5			
288	tgacaatgac catgagcccc aaatatcccc cgggggctta gagcctctca gtaaaaaca	60		
290	tttccgtgaa acagaagtct gagaaggctca gggcccagaa taaggctctg acgtctcccc	120		
292	ccggaggaca gctcagcacc agctcaggct aggcctgac gtgtccccc aaagacaaat	180		
294	cataagctca gacctccggg aagccacccgg gaaccaccca tttcctcccc atgtttgtca	240		
296	agccgtcctc aggcgttgc gacaacccct cacctcaaaa aacttttcat ggcacgcata	300		
298	cggctcaata aaataacagg agtctataaa agcgtggggc cagttcagga ggg	353		
301	<210> SEQ ID NO: 6			
302	<211> LENGTH: 456			
303	<212> TYPE: DNA			
304	<213> ORGANISM: Human immunodeficiency virus type 1			
307	<220> FEATURE:			
308	<221> NAME/KEY: CDS			
309	<222> LOCATION: (1)..(456)			
311	<400> SEQUENCE: 6			
312	ctg gaa ggg cta att tgg tcc caa aga aga caa gag atc ctt gat ctg	48		

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313	Leu	Glu	Gly	Leu	Ile	Trp	Ser	Gln	Arg	Arg	Gln	Glu	Ile	Leu	Asp	Leu	
314	1				5				10					15			
316	tgg	atc	tac	cac	aca	caa	ggc	tac	ttc	cct	gat	tgg	cag	aat	tac	aca	96
317	Trp	Ile	Tyr	His	Thr	Gln	Gly	Tyr	Phe	Pro	Asp	Trp	Gln	Asn	Tyr	Thr	
318									20		25			30			
320	cca	ggg	cca	ggg	atc	aga	tat	cca	ctg	acc	ttt	gga	tgg	tgc	ttc	aag	144
321	Pro	Gly	Pro	Gly	Ile	Arg	Tyr	Pro	Leu	Thr	Phe	Gly	Trp	Cys	Phe	Lys	
322									35		40			45			
324	cta	gta	cca	gtt	gag	cca	gag	aag	gta	gaa	gag	gcc	aat	gaa	gga	gag	192
325	Leu	Val	Pro	Val	Glu	Pro	Glu	Lys	Val	Glu	Glu	Ala	Asn	Glu	Gly	Glu	
326									50		55			60			
328	aac	aac	agc	ttg	tta	cac	cct	atg	agc	ctg	cat	ggg	atg	gag	gac	gcg	240
329	Asn	Asn	Ser	Leu	Leu	His	Pro	Met	Ser	Leu	His	Gly	Met	Glu	Asp	Ala	
330	65					70				75			80				
332	gag	aaa	gaa	gtg	tta	gtg	tgg	agg	ttt	gac	agc	aaa	cta	gca	ttt	cat	288
333	Glu	Lys	Glu	Val	Leu	Val	Trp	Arg	Phe	Asp	Ser	Lys	Leu	Ala	Phe	His	
334						85				90			95				
336	cac	atg	gcc	cga	gag	ctg	cat	ccg	gag	tac	tac	aaa	gac	tgc	tga	cat	336
337	His	Met	Ala	Arg	Glu	Leu	His	Pro	Glu	Tyr	Tyr	Lys	Asp	Cys		His	
338						100			105			110					
340	cga	gct	ttc	tac	aag	gga	ctt	tcc	gct	ggg	gac	ttt	cca	ggg	agg	cgt	384
341	Arg	Ala	Phe	Tyr	Lys	Gly	Leu	Ser	Ala	Gly	Asp	Phe	Pro	Gly	Arg	Arg	
342						115			120			125					
344	ggc	ctg	ggc	ggg	act	ggg	gag	tgg	cgt	ccc	tca	gat	gct	gca	tat	aag	432
345	Gly	Leu	Gly	Gly	Thr	Gly	Glu	Trp	Arg	Pro	Ser	Asp	Ala	Ala	Tyr	Lys	
346						130			135			140					
348	cag	ctg	ctt	ttt	gcc	tgt	act	ggg									456
349	Gln	Leu	Leu	Phe	Ala	Cys	Thr	Gly									
350					145			150									
353	<210>	SEQ	ID	NO:	7												
354	<211>	LENGTH:	110														
355	<212>	TYPE:	PRT														
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358	<400>	SEQUENCE:	7														
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361	1				5				10					15			
364	Trp	Ile	Tyr	His	Thr	Gln	Gly	Tyr	Phe	Pro	Asp	Trp	Gln	Asn	Tyr	Thr	
365						20			25			30					
368	Pro	Gly	Pro	Gly	Ile	Arg	Tyr	Pro	Leu	Thr	Phe	Gly	Trp	Cys	Phe	Lys	
369						35			40			45					
372	Leu	Val	Pro	Val	Glu	Pro	Glu	Lys	Val	Glu	Glu	Ala	Asn	Glu	Gly	Glu	
373						50			55			60					
376	Asn	Asn	Ser	Leu	Leu	His	Pro	Met	Ser	Leu	His	Gly	Met	Glu	Asp	Ala	
377	65					70				75			80				
380	Glu	Lys	Glu	Val	Leu	Val	Trp	Arg	Phe	Asp	Ser	Lys	Leu	Ala	Phe	His	
381						85			90			95					
384	His	Met	Ala	Arg	Glu	Leu	His	Pro	Glu	Tyr	Tyr	Lys	Asp	Cys			
385						100			105			110					
388	<210>	SEQ	ID	NO:	8												

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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37
Seq#:38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61
Seq#:62,63,64,65

VERIFICATION SUMMARY

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